

<400> 3

catgcagcga attagaacgt

20

<210> 4

<211> 18

<212> DNA

<213> Mycobacterium sp.

<400> 4

aacttgacga actcgccg

18

<210> 5

<211> 18

<212> DNA

<213> Mycobacterium sp.

<400> 5

aggtattcgc gcagcatg

18

<210> 6

<211> 18

<212> DNA

<213> Mycobacterium sp.

<400> 6

gtasgtcatr rstyctcc

18

<210> 7

<211> 18

<212> DNA

<213> Mycobacterium sp.

<400> 7

ggtgaacatt gggccgaa

18

Sequence 1

<210> 8
<211> 21
<212> DNA
<213> Mycobacterium avium

<400> 8

cggtcgtctc cgaagcccg c

21

<210> 9
<211> 20
<212> DNA
<213> Mycobacterium gastri

<400> 9

gatcggcagc ggtgccgggg

20

<210> 10
<211> 19
<212> DNA
<213> Mycobacterium gastri

<400> 10

gtatcgcggg cggcaaggt

19

<210> 11
<211> 24
<212> DNA
<213> Mycobacterium gastri

<400> 11
tctgccgatc ggcagcggtg ccgg

24

<210> 12
<211> 24
<212> DNA
<213> Mycobacterium gastri

<400> 12
gccggggccg gtattcgcg gcgg

24

<210> 13
<211> 22
<212> DNA

<213> Mycobacterium gordonae

<400> 13
gacgggcact agttgtcaga gg 22

<210> 14
<211> 21
<212> DNA
<213> Mycobacterium intracellulare

<400> 14
gggccgccgg gggcctcgcc g 21

<210> 15
<211> 21
<212> DNA
<213> Mycobacterium intracellulare

<400> 15
gcctcgccgc ccaagacagt g 21

<210> 16
<211> 22
<212> DNA
<213> Mycobacterium leprae

<400> 16
gatttcggcg tccatcggtg gt 22

<210> 17
<211> 21
<212> DNA
<213> Mycobacterium kansasii

<400> 17
gatcgtcggc agtggtgacg g 21

<210> 18
<211> 17
<212> DNA
<213> Mycobacterium kansasii

<400> 18
tcgtcggcag tggtagac 17

100741416-031403

```
<210> 19
<211> 27
<212> DNA
<213> Mycobacterium kansasii
```

```
<400> 19
atccgccgat cgtcggcagt ggtgacg
```

```
<210> 20
<211> 21
<212> DNA
<213> Mycobacterium malmoense
```

<400> 20
gaccacaaac actggtcggc g

```
<210> 21
<211> 21
<212> DNA
<213> Mycobacterium marinum
```

<400> 21
cggaggtgat ggcgctggtc g

```
<210> 22
<211> 20
<212> DNA
<213> Mycobacterium scrofulaceum
```

```
<400> 22
cggcggcacg gatcggcgtc
```

```
<210> 23
<211> 20
<212> DNA
<213> Mycobacterium simiae
```

<400> 23
atcgctcctg gtcgcgcta

```
<210> 24
<211> 21
<212> DNA
<213> Mycobacterium szulgai
```

<400> 24
cccggcgcgga ccagcagaac g

<210> 25
<211> 22
<212> DNA
<213> Mycobacterium tuberculosis

<400> 25
gccgtccagt cgттаатgтc gc 22

<210> 26
<211> 22
<212> DNA
<213> Mycobacterium xenopi

<400> 26
cggtagaagc тсgatgaca cg 22

<210> 27
<211> 21
<212> DNA
<213> Mycobacterium avium

<400> 27
gcgcggtcgt ctccgaagcc c 21

<210> 28
<211> 28
<212> DNA
<213> Mycobacterium avium

<400> 28
ccgctcggca ctaaaaggca gtggaagc 28

<210> 29
<211> 21
<212> DNA
<213> Mycobacterium avium

<400> 29
gaagcccgcg ggcaagccaa t 21

<210> 30
<211> 18
<212> DNA
<213> Mycobacterium gastri

<400> 30
gatcgggcagc ggtgccgg 18

<210> 31
<211> 18
<212> DNA
<213> Mycobacterium gastri

<400> 31
gcggtgccgg ggccggta 18

<210> 32
<211> 21
<212> DNA
<213> Mycobacterium gastri

<400> 32
cggtatcgcg ggccggcaagg t 21

<210> 33
<211> 27
<212> DNA
<213> Mycobacterium gordonae

<400> 33
ggcgacgggc actagttgtc agaggtg 27

<210> 34
<211> 16
<212> DNA
<213> Mycobacterium intracellulare

<400> 34
ccgccggggg cctcgc 16

<210> 35
<211> 21
<212> DNA
<213> Mycobacterium intracellulare

<400> 35
tcgccgccca agacagtggc g 21

<210> 36

<211> 23
<212> DNA
<213> Mycobacterium kansasii

<400> 36
atccgccgat cgtcggcagt ggt 23

<210> 37
<211> 23
<212> DNA
<213> Mycobacterium kansasii

<400> 37
gatcgtcggc agtggtgacg ggg 23

<210> 38
<211> 21
<212> DNA
<213> Mycobacterium kansasii

<400> 38
gggccggtat cacgggggca a 21

<210> 39
<211> 24
<212> DNA
<213> Mycobacterium leprae

<400> 39
gatttcggcg tccatcggtg gtag 24

<210> 40
<211> 32
<212> DNA
<213> Mycobacterium malmoense

<400> 40
aacgcaagat ctcgaagggtg ttttcaaagg cg 32

<210> 41
<211> 23
<212> DNA
<213> Mycobacterium malmoense

<400> 41
gaccacaac actggtcggc gcc 23

<210> 42
<211> 19
<212> DNA
<213> Mycobacterium marinum

<400> 42
gccaatcggc tcggcggga 19

<210> 43
<211> 22
<212> DNA
<213> Mycobacterium marinum

<400> 43
atcgacggag gtgatggcgc tg 22

<210> 44
<211> 21
<212> DNA
<213> Mycobacterium simiae

<400> 44
cgatcgctcc tggtcgcgcc t 21

<210> 45
<211> 19
<212> DNA
<213> Mycobacterium simiae

<400> 45
ccggcgacc cgctcgaac 19

<210> 46
<211> 21
<212> DNA
<213> Mycobacterium szulgai

<400> 46
ctgcgatgag caagcggccc g 21

<210> 47
<211> 16
<212> DNA
<213> Mycobacterium szulgai

<400> 47
gcggcccggg cggccg

16

<210> 48
<211> 24
<212> DNA
<213> Mycobacterium tuberculosis

<400> 48
cggccgtcca gtcgttaatg tcgc

24

<210> 49
<211> 25
<212> DNA
<213> Mycobacterium xenopi

<400> 49
cggtagaagc tgcgatgaca cgcca

25

<210> 50
<211> 15
<212> DNA
<213> Mycobacterium avium

<400> 50
gcaagccaat ggcca

15

<210> 51
<211> 14
<212> DNA
<213> Mycobacterium intracellulare

<400> 51
ctcgccgccc aaga

14

<210> 52
<211> 19
<212> DNA
<213> Mycobacterium tuberculosis

<400> 52
ccgtccagtc gttaatgtc

19

<210> 53
<211> 17

1004345 024402

<212> DNA
<213> Mycobacterium simiae

<400> 53
acgatcgctc ctggctcg 17

<210> 54
<211> 22
<212> DNA
<213> Mycobacterium malmoense

<400> 54
aagatctcga aggtgttttc aa 22

<210> 55
<211> 19
<212> DNA
<213> Mycobacterium avium subspecies paratuberculosis

<400> 55
ggtcgcgtca ttcagaatc 19

<210> 56
<211> 19
<212> DNA
<213> Mycobacterium avium subspecies paratuberculosis

<400> 56
tctcagacag tggcagggtg 19

<210> 57
<211> 216
<212> DNA
<213> Mycobacterium intracellulare

<400> 57
gttctacctg tgctgagcaa gctccggtga taccgaccgt ctgccggag ggccgccggg 60
ggcctcgccg cccaagacag tggcggcgcc accggttccc gcacgtgcgc tagcgtgggt 120
gatcgaccgc gtcgcaatgc ggtgacgcgc ctgcaagcac agcgtcgcat cgccaccgcg 180
gcgcccgcctc ggcacttaaa ggcactggta gcaaca 216

<210> 58
<211> 881
<212> DNA

204720-54400

<213> Mycobacterium avium

<400> 58

tcgtagctgg cttcctcgtc ggtccacagc gcccgcatcg cttccaggta ttcgcgcagc 60
atggtgctggc gccggccccg cggcacgccg tggtcggcga gttcgtcggg gttccagccg 120
aaccgcagc cgaggctgac ccggccgccg gacagatggg caagggtggc aatacttttc 180
gccagcgtga tcgggtcgtg ttcgaccggc agggccaccg cgggtggacag ccgcacccgc 240
gaggtgacgg cacaggccgc gccagactg acccacgggt ccagggtgcg catgtagcgg 300
tcgtcgggca gcgacgcgtc gccggtgggc ggggtgcgcg cctcccgtt gatcgggata 360
tgctgtgtgt ccggcacgta gaaggctgca aaccctgggt cgtcggcaag cttcgcggcc 420
gcagccggag agatgccacg gtcgctgggt aaaagcaca gcccgtaatc catgcagtga 480
attagaacgt gttctacctc tgcggggcaa gctgtcgtga tacggaccgt ctcgccgcgc 540
ggtcgtctcc gaagcccgcg ggcaagccaa tggcgacggc accggccgtc gcacgtgcgc 600
tagcgtgggt gatcgaccgt gtcgctcgcg cagtgcgcg cctgcaagca ccgcgtcgca 660
tcgcaaccgt ggcgcccgt cggcactaaa aggcagtga agcaacagga ggagccatga 720
cctactctcc cggcagcccc ggatatccac cggcgagtc tggcggcacc tatgcaggcg 780
ccacaccatc tttcgccaaa gacgacgacg gcaagagcaa actcccgtc tacctcaaca 840
tcgccgtggg cgcctgggt ttcgggcct acctgctgaa t 881

<210> 59

<211> 642

<212> DNA

<213> Mycobacterium gastri

<400> 59

gtgcgccggc gccccggcgc cagcccatgg tcggcgagtt cgtgcgcccg gcggcacgcc 60
atggtcggcg agttcgtcgg tgttccagcc gaatccgacg ccgacgctga cccggcccc 120
ggatagtggg ccagcgtggc aatgcttttg gccagcgtga tcgggtcatg ctccaccgca 180
gcgcaaccgc ggttgacagc ctgactcggg aggtgaccgc tgaagccgca cccaagctca 240
cccacgggtc cagggtgccc atatagcggg cgtccggcag cgacgcgtca cccgtcgtgg 300
gatgggcggc ttcccgtttg accgggatat gcgtgtgttc gggcacgtag agagtgcgaa 360
agccatgggc gtcggccagt ttcgcggtc cgcggggga gatccacgg tcgctgggtga 420
aaaggacaag cccgtaatcc atgaacagaa ttagaacgtg ttctacctcc gccgggcaag 480

cggtcatct gccgatcggc agcgggtgccg gggccgggtat cgcgggaggc aaggtcgcca 540
 cggcgtgagt acccgggcgt gcgctagcgt gggtcacga attgtgtgc agggagcaat 600
 cgtcgcattg cagcaggcgt agcgacggca ccggaggtaa ca 642

<210> 60
 <211> 745
 <212> DNA
 <213> Mycobacterium gordonae

<400> 60
 gtgcgacgac ggccggccag cacgttatgg tcggcgagct cgtcgggtgtt ccagccgaac 60
 ccgacgccga ggctaactcg cccgccggac aggtgatcca gcgtggcgat gcttttcgcc 120
 aaggatgatcg ggtcatgctc gaccggcaac gcgactgccg tcgacagccg cccccgcgac 180
 gtcacagcac acgccgcgcc caggctcacc cagggatcca gggcgcgcat ataacggtcg 240
 tcgggcagcg tctcgtctcc ggtgggtggga tgagccgcct cgcgtttgat cgggatatgc 300
 gtgtgttcgg gtacgtagaa ggtgtgaaaa ccatgtgtgt cggcaagttt cgctgctgcc 360
 gcaggggaaa taccgcgatc gctgggtgaac agaacgaggc ttagtccat gcccgaattt 420
 agaacgtgtt ctacttttgg ccgcagccga cccctgcgg cgacggggcac tagttgtcag 480
 aggtgcgcta gcgtggttga tcgaatgcgt cgcaggccgt accgcgtcgt gccgaagcag 540
 aggggccgtg acggcaccgg aagcaacagg aggaattatg acctaccgc cggtagtcc 600
 cggatatcca tccgccagc agtcggccgg caactacggc agctccgctc ccgccgccgg 660
 ccagtccgag ccgggtgaaa gcaagctggg actgtacctg gccatcgcg tggcggccct 720
 gggcctactg gcgtacctct tcagc 745

<210> 61
 <211> 785
 <212> DNA
 <213> Mycobacterium kansasii

<400> 61
 gtgcgccggc gcgccggcgg cacgccatgg tcagcgagtt cgtcgggtgtt ccagccgaat 60
 ccgacgccga cgctgaccgg ccccccggat aggtgggtcca gcgtggcaat gcttttggcc 120
 agcgtgatcg ggtcatgctc gaccggcaac gcaaccgctg ttgacagtcg gaccgggaag 180
 gtgaccgctg aagccgcgcc caaactcacc cacgggtcca gcgtgcgcat atagcggtcg 240
 tccggcagcg acgcgtcacc cgctgtggga tggcggcctc ccgtttgacc gggatgtgcg 300

1007446-021402

tgtgttcggg	cacgtagaaa	gtgcgaaagc	catggtcgtc	ggccagtttc	gcggctgccg	360
cgggagaaat	gccacggtcg	ctggtgaaaa	ggacaagccc	gtaatccatg	aacagaatta	420
gaacgtgttc	tacctcagcc	gggcaagcgg	ctcatccgcc	gatcgtcggc	agtggtgacg	480
gggccggtat	cacgggggca	aggtcgccac	ggcgcgagta	ccaggccgtg	cgctagcgtg	540
ggtcatcgaa	tcgtgtcgca	gggagcaatc	gtcgcattgc	agcaggcgta	gcgacggcac	600
tggaggtaac	aggaggagcc	atgacctact	caccaggtag	tcccggatat	ccgcccgcgc	660
aatcggccgg	ctcctacgga	gccgccacac	cgtctttcgc	caaggccgac	gacggtgtca	720
gcaagcttcc	gatgtacctg	agcatggcgg	ttgccgcgct	cgggctgctg	gcgtatctgg	780
ccagc						785

<210> 62
 <211> 691
 <212> DNA
 <213> Mycobacterium malmoense

<400> 62	
tcgtaggccg	cttcctcctg ggtccacagc gcccgcatcg cctcgatgta ttcacgcagc 60
atgggtgcgac	ggcgcccggc cggcacgccg tggtcggcga gtcgtcgggt gttccagcca 120
aacccaacgc	cgaggctgac ccggccggcc gacagggtgg ccaagggtggc aataacttttc 180
gccagcgtga	tcgggtcgtg ctcgacgggc agcgccaccg cggtagacag ccgcacccgc 240
gacgtcacgg	cgcacgccgc gcccaggctc acccacgggt ctagcgtgcg catatagcgg 300
tcgtccggca	agcgacgcgc caccgcgtcg cggatggggc gcctcgcgct tgaccgggat 360
atgggtgtgt	tccggcacgt agaacgtctg gaagccgtgg tcgtcggcaa gtttggcggc 420
tgccgccggg	gagatgccgc ggtcgtcgtt gaaaagtaca agcccgtaat ccatggacag 480
aattagaacg	tgttctaccg gcgggtgggca agccgctgcg ccgccgagga tctcgactcg 540
gaccacaac	actggtcggc gccgggcgcg ccgacaggtc ggtcggcccc gcacgggcgg 600
ccgaacgtgc	gctagcgtgg gtgatcgatc gcgtcgcaac gcaagatctc atgcggcgctc 660
gctgagggtc	ttgaaggcac tggaagcaat a 691

<210> 63
 <211> 698
 <212> DNA
 <213> Mycobacterium simiae

<210> 65
 <211> 802
 <212> DNA
 <213> Mycobacterium tuberculosis

<400> 65
 tcatagcagg cctcctcttg ggtccacaac gcccgcacgc cctcgaggta ttcgcgcagc 60
 atggtgcggc ggcgtccggg tggcacacca tgatcgacga gtcgctcggt gttccagccg 120
 aacccgaccc cgacgtgac ccggccgtgc gacaaatgat ccagcgtcgc aatgcttttc 180
 gccagcgtga tcggatcatg ctcgaccggc agcgccaccg cggaggcaag ccggatccgc 240
 gacgtcaccg ccgatgctgc tcccaggctc acccacgggt ccaacgtgcg catatagcgg 300
 tcgtccggca gcgaagcgtc acccgtcgtc ggatggggccg cctggcgctt gaccgggatg 360
 tgggtgtggt cgggcacgta aaacgtgcga aacccgtggc tttcagcaag tctggcgggc 420
 gcggccgggg tgatgccgcg gtcgctgggt aacagcaca gtccgtagt catgcaccga 480
 attagaacgt gttccacctg cgccgggcaa gcggccgtcc agtcgttaat gtcgcgagcg 540
 ccggtcgtc cggcagcggc acccgaacgt gcgctagcgt ggttgatcga atcgctcgc 600
 cgggagcaca gcgtcgact gcaccagtgg aggagccatg acctactcg cggttaaccc 660
 cggatacccg caagcgcagc ccgcaggctc ctacggaggc gtcacaccct cgttcgccca 720
 cgccgatgag ggtgcgagca agctaccgat gtacctgaac atcgcggtgg cagtgcctcg 780
 cctggctgcg tacttcgcca gc 802

<210> 66
 <211> 628
 <212> DNA
 <213> Mycobacterium bovis

<400> 66
 tcatagcagg cctcctcttg ggtccacaac gcccgcacgc cctcgaggta ttcgcgcagc 60
 atggtgcggc ggcgtccggg tggcacacca tgatcgacga gtcgctcggt gttccagccg 120
 aacccgaccc cgacgtgac ccggccgtgc gacaaatgat ccagcgtcgc aatgcttttc 180
 gccagcgtga tcggatcatg ctcgaccggc agcgccaccg cggaggcaag ccggatccgc 240
 gacgtcaccg ccgatgctgc tcccaggctc acccacgggt ccaacgtgcg catatagcgg 300
 tcgtccggca gcgaagcgtc acccgcgtc ggatggggccg cctggcgctt gaccgggatg 360

tgggtgtgtt cgggcacgta aaacgtgcga aacccgtggc tttcagcaag tctggcggcc 420
 gcggccgggg tgatgccgcg gtcgctgggt aacagcacia gtccgtagtg catgcaccga 480
 attagaacgt gttccacctg cgccgggcaa gcggccgtcc agtcgttaat gtcgcgagcg 540
 ccggtcgctc cggcagcggc acccgaacgt gcgctagcgt ggttgatcga atcgcgctgc 600
 cgggagcaca gcgtcgact gcaccagt 628

<210> 67
 <211> 400
 <212> DNA
 <213> Mycobacterium xenopi

<400> 67
 gttcacccac cgcgagcaag cggcgccggt agaagctgcg atgacacgcc agtcgccgcg 60
 agacccccgc cgccaggtgc gctagcgtgg atggtcgaat cgcgtcgcaa cgcccgccct 120
 gacaagtcac ggcgttaatg gagcgggtcca cgcagcgtcg cgcggaagcg gcgccctggg 180
 gatacagcgt cgcaacacag tggcgcccca acggcactga tgcacaggag aagccatgac 240
 gtactcgccc ggtagccccg gatatccacc cgcgcagtc cccggttcct acggcggctc 300
 cccacagtcg ttcgccaaat ccgatgacgg cgccagcaag ctgcagctgt atctgaccgt 360
 cgcggtgggtg gcgctcggcc tggcggccta cctggcgagt 400

<210> 68
 <211> 707
 <212> DNA
 <213> Mycobacterium paratuberculosis

<400> 68
 tcgtagctgg cttcctcgtc ggtccacagc gcccgcatcg cttccaggta ttcgcgcagc 60
 atggtgcggc gccggccccg cggcacgccg tggtcggcga gttcgtcggg gttccagccg 120
 aacccgacgc cgaggctgac ccggccgccc gacagatggg caaggggtggc aatacttttc 180
 gccagcgtga tcgggtcgta ttcgaccggc agggccaccg cgggtggacag ccgcaccgcg 240
 gaggtgacgg cacaggccgc gccagactg acccacgggt ccagggtgag catgtagcgg 300
 tcgtcgggca gcgacgcgtc gccgggtggt ggggtgcgcgg cctcccgtt gatcgggata 360
 tgcgtgtgtt ccggcacgta gaaggctgca aacccgtggg cgtcggcaag cttcgcggcc 420
 gcagccggag agatgccacg gtcgctgggt aaaagcacia gcccgtaatc catgcagtga 480
 attagaacgt gttctacctc tgcggggcaa gctgtcgtga tacggaccgt ctcgccgcgc 540

tcgtcgggaa gcgaggaatc gcccgctcgtt ggatgagcgg cttctcgctt gattgggata	360
tgggtgtgct caggcacata gaaggtgtga aagccgtggt cgtcagcgag tctcgccgcc	420
gccgccggag cgatgccgcg gtcgctggtg aaaagcacia gcccatagtc cataacagaa	480
ttagaacgtg ttctacctcg gccgggcaag cgccccccgc gccaatcggc ttggcgggat	540
cgacggaggt gatggcgctg gtcgagcggg ggcaggctcg cgcggcgcga gcaccggaac	600
gtgcgctagc gtggttggtc gaatcgctc gcagggacca agcgtcgcaa tgcagcagcg	660
gcgccgcgac ggcgcgcaag taaca	685

<210> 71
 <211> 729
 <212> DNA
 <213> Mycobacterium leprae

20170207 09:24:00

<400> 71	
tcatataacg gcttcattct tgtgtccata atgcctgcat tgcttcgagg cattcgtaca	60
ccatggtgcg gcgccgcccc gatggcacat cgtgatcggg gagctcggtg gtcttccaac	120
cgaacccgac gccgaagttc actcactcgc cggacaaatt atccagggtg acaatacttt	180
tcgcaagtgt gattgggtca tgtagacgg gcagcgccac caccatgaac agtcgtagcc	240
tgccgatata acccgcatgt cgcgccccaa cttacccatg agtcataggt acgcatcgca	300
tatagctgtc gtcactggac agtgatactc atccgtaacc aggtagtggg gtctgagtgg	360
caatggcata tgggtgtggt cgggcacata gaacttgctg aagccgtggc tctccgcaag	420
cttgactgct gccgcggggg tgatgccgcg gtcgcttggtt aaaagcgcaa tcccgtagcc	480
cataccaaga atttagagcg tggtccacct gcgacggcca agcggtcgtg ccgacgattt	540
cggcgtccat cgggtgtagg cgagctgaca cgcaggctcg gccggcgcg tgcgcctaac	600
gtgcgctagc gttgatgac gaatgcgccg caacgtaagc gctgccaatt tgggcgttta	660
tccaacggtg cgcattgggag cacagcgttg cactgcagca gtggcgccgt gacggcactg	720
gaaataaca	729

<210> 72
 <211> 129
 <212> DNA
 <213> Mycobacterium nonchromogenicum

<400> 72	
gttcctgttc ggcgggcaac ggggggggtcc ttgtcgcgca gtgttgacct accgactcgg	60

ggtcgtctgc gaagcccgcg ggcaagccaa tggcgacggc accggccgtc gcacgtgcgc 600
tagcgtgggt gatcgaccgt gtcgctcgcg cagtgcgcg cctgcaagca ccgcgtcgca 660
tcgcaaccgt ggcgcccgtc cggcactaaa aggcagtgga agcaaca 707

<210> 69
<211> 686
<212> DNA
<213> Mycobacterium marinum

<400> 69
tcgtaggcgg cttcctcctg cgtccacagt cggccgcacg gcctcgaggt attcacgcaa 60
catcgtgcgg cgccgtccgg gtggaacgcc atggtcggcg agttcgtcgg tgttccaacc 120
gaacccacg ccgaggctga cccgtccgcc ggacagatga tccagcgtgg caatgctctt 180
ggccaggggtg atcgggtcat gtcgacggg cagcgccacc gcagtcgaca gccgtaccg 240
cgaggtcacc gccgatgccg cgcccaaact caccagggg tccagcgtgc gcatataacg 300
atcgtcggga agcgaggaat cgcccgctgt tggatgagcg gcttctcgct tgattgggat 360
atgggtgtgc tcaggcacgt agaaggtgtg aaagccgtgg tcgtcagcga gtctcgccgc 420
cgccgccgga gcgatgccg ggctcgctgt gaaaagcaca agcccatagt ccataacaga 480
attagaacgt gttctacctc ggccggggcaa gcgcccccg cgccaatcgg ctcgggcgga 540
tcgacggagg tgatggcgct ggctgagcgg gggcaggtcg ccgcggcgcg agcaccggaa 600
cgtgcgctag cgtggttgtt cgaatcgctg cgcagggacc aagcgtcgca atgcagcagc 660
ggcgccgcga cggcgcgcaa gtaaca 686

<210> 70
<211> 685
<212> DNA
<213> Mycobacterium ulcerans

<400> 70
tcgtaggcgg cttcctcctg cgtccacagc gcccgcacg cctcgaggta ttcacgcaac 60
atcgtgcggc gccgtccggg tggaacgcca tggtcggcga gttcgtcggg gttccaaccg 120
aacccacgc cgaggctgac ccgtccgccg gacagatgat ccagcgtggc aatgctcttg 180
gccaggggtga tcgggtcatg ctcgacgggc agcgccaccg cagtcgacag ccgtaccgc 240
gaggtcaccg ccgatgccg gcccaaactc acccaggggt ccagcgtgcg catataacga 300

2007-04-20 09:14:02

cccgaagtg cgctagcgtg gatggtcgaa gcgcgccgca ccgccccacca gcgccctgcc 120
acaagcaca 129

<210> 73
<211> 219
<212> DNA
<213> Mycobacterium scrofulaceum

<400> 73
gttctacctc cggtagagcaa gctgccgccg cggcggcacg gatcggcgtc caagccggtc 60
gcgacggcac gcccgctccc aagtgcgcta gcgtggttga tcgatcgcgt cgcaacgcaa 120
ccgccgggca cggcattcgt ggaacggcgc gcccgcacgc acagcgccgc gacgcaactg 180
tggcgcccgcc aaaggcactt cacggcactg gaagcaaca 219

<210> 74
<211> 116
<212> DNA
<213> Mycobacterium triplex

<400> 74
gttctacctt ggtcggcaag cggcgcggga acggccccgg caccggctcc ccgacgtgcg 60
ctagcgtggt tgttcgaatc gcgtcgcaac gcaagcgcggt cgagcctgga aaaaca 116

<210> 75
<211> 568
<212> DNA
<213> Mycobacterium paratuberculosis

<400> 75
gatctcagac agtggcaggt ggcggctccg aagctggcgt cagctattgg tgtaccgaat 60
gttggtgtca ccgagccgggt cccaggtgtg ttcgagttgc agctgagaat tgcgatccg 120
cttagttcgc cgcttgaatg gtcgtctgtg ccagccgccc actcgtggtc tctgagtttg 180
ggtatcgatg aaatgggcgt ctaccagtcg ctcccgttgg cgaacgtatc gggcgttgta 240
gtgggaggcg taccaggggc ggggaaaacc gcgtggctga cgagtgcctc ggggtcgttc 300
ggcgctcag cggcgggtcca gttcgctgtc atcgacggga aggggtgtca ggacttgga 360
tgcctgcgtg ctcgtagctg ccgattcatg aatgacgatc tggagctgcc tgagattgca 420
gcgattctga atgacgcgac cggcttagtc cgtgatcgaa ttagacaggg caacaacata 480

ttcggatcgt ccaacttttg ggatcgcggc ccgacgccgc aggttccgct ggtgttcgtg 540
gtgattgacg gctatcgggg ccgagatc 568

<210> 76
<211> 715
<212> DNA
<213> Pseudomonas aeruginosa

<400> 76
gcccgtcaca ccatgggagt gggttttacc agaagtggct agtctaaccg caaggaggac 60
ggtcaccacg gtaggattca tgactggggg gaagtcgtaa caaggtagcc gtatcgggaa 120
gtgcggtcgtg atcacctcct ttccagagct tctcgacaaa gttgagcgct cacgcttata 180
ggctgtaaat taaagacaga ctacgggggc ttagctcag tcggtagag caccgtcttg 240
ataaggcggg ggtcgttggt tcgaatccaa ccagaccac cattgtctgt cggtaacaca 300
cctgaggcaa atctgtacat gggggcatag ctacgctggg agagcacctg ctttgcaagc 360
aggggtcgtc ggttcgatcc cgtctgctc caccaatcac caacgctaag ggcttggttc 420
agacactgaa ccgagaattt tgcattggcg attgagccag tcagaggata tcaacagata 480
tcggctgtcg ttctttaaca atctggaaga agtaagtaat ttggatagcg gaagcgtctt 540
gagatggacg tggaaactat ccgggttggt attgtatcga tgtatctcaa gatgattoga 600
actctaagtt tgactcaatt ggaatacggc acaacgcgag aactcaacct gtaacgagac 660
agactcgta taggggtcaag cgaacaagt catgtgggtg atgccttggc rrtca 715

<210> 77
<211> 653
<212> DNA
<213> Burkholderia cepacia

<400> 77
gcccgtcaca ccatgggagt gggttgctcc agaagtagct agtctaaccg caagggggac 60
ggttaccacg gagtgattca tgactggggg gaagtcgtaa caaggtagcc gtaggggaac 120
ctgcggtcgtg atcacctcct taatcgaaga tctcagcttc ttcataagct cccacacgaa 180
ttgcttgatt cactgggttag acgattgggt ctgtagctca gttgggttaga gcgcacccct 240
gataagggtga ggtcggcagt tcgaatctgc ccagaccac caattggttg tgtgctgcgt 300
gatccgatac gggccatagc tcagctggga gagcgctgc tttgcacgca ggaggtcagg 360
agttcgatcc tccttggtc caccatctaa aacaatcgtc gaaagctcag aaatgaatgt 420

10074246:021402

tcgtgaatga acattgattt ctggtctttg caccagaact gttcttttaa aattcgggta	480
tgtgatagaa gtaagactga atgatctctt tctctgggtga tcattcaagt caaggtaaaa	540
tttgcgagtt caagcgcgaa ttttcggcga atgtcgtctt cacagtataa ccagattgct	600
tgggggttata tgggtcaagtg aagaagcgca tacggtggat gccttggcrr tca	653

<210> 78
 <211> 600
 <212> DNA
 <213> Pseudomonas putida

<400> 78	
gggttccccg aagtagctag tctaaccctt gggaggacgg ttaccacggg gtgattcatg	60
actgggggtga agtcgtaaca aggtagccgt aggggaacct gcggctggat cacctcctta	120
atcgacgaca tcagcctgct gatgagctcc cacacgaatt gcttgattca ttgtcgaaga	180
cgatcaagac cctatatagg tctgtagctc agttgggttag agcgaccccc tgataagggg	240
gaggtcggca gttcaaactt gccagacct accaatatgc ggggccatag ctcagctggg	300
agagcgcttg ccttgcacgc aggaggtcag cggttcgatc ccgcttggct ccaccactcg	360
ctttacttga tcagaactta gaaatgaaca ttcgttgatg aatgttgatt tctgactttt	420
gtcagatcgt tctttaaaaa ttcggatatg tgatagaaat agactgaaca ccagtttcac	480
tgttggtgga tcaggctaag gtaaaatttg tgagttctgc tcgaaagagc aacgtgcgaa	540
ttttcggcga atgtcgtctt cacagtataa ccagattgct tgggggttata tgggtcaagtg	600

<210> 79
 <211> 446
 <212> DNA
 <213> Pseudomonas putida

<400> 79	
gggtcaccag aagtagctag tctaaccctt gggaggacgg ttaccacggg gtgattcatg	60
actgggggtga agtcgtaaca aggtagccgt aggggaacct gcggctggat cacctcctta	120
atcgacgaca tcagcctgct gatgagctcc cacacgaatt gcttgattct ttgtaaaaga	180
cgatcaaggc cttgtgcagg cctcgcgttg ttcctgatca gaacttgga atgagcattc	240
gcttcgaatg ttgatttctg gcttttgtca gatcgttctt taaaaattcg gatatgtgat	300
agaaatagac tgaacaccag tttcactgct ggtggatcag gctaaggtaa aatttgtgag	360

ttctgctcga aagagcaacg tgcgaatttt cggcgaatgt cgtcttcaca gtataaccag 420
attgcttggg gttatatggg caagtg 446

<210> 80
<211> 660
<212> DNA
<213> Pseudomonas aeruginosa

<400> 80
gcccgtcaca ccatgggagt gggttgctcc agaagtagct agtctaaccg caagggggac 60
ggttaccacg gagtgattca tgactggggg gaagtcgtaa caaggtagcc gtaggggaac 120
ctgcggctgg atcacctcct taatcgaaga tctcagcttc ttcataagct cccacacgaa 180
ttgcttgatt cactgggttag acgattgggt ctgtagctca gttgggttaga gcgcacccct 240
gataaggtga ggtcggcagt tcgaatctgc ccagaccac caattggttg tgtgctgcgt 300
gatccgatac gggccatagc tcagctggga gagcgctgc tttgcacgca ggaggtcagg 360
agttcgatcc tccttggtc caccatctaa aacaatcgtc gaaagctcag aaatgaatgt 420
tcgtgaatga acattgattt ctggctcttg caccagaact gttctttaa aattcgggta 480
tgtgatagaa gtaagactga atgatctctt tctactggta tcattcaagt caaggtaaaa 540
tttgcgagtt caagcgcgaa ttttcggcga atgtcgtctt cacagtataa ccagattgct 600
tggggttata tgggtcaagtg aagaagcgca tacgggtggat gccttggcrr tcasaggcga 660

<210> 81
<211> 722
<212> DNA
<213> Burkholderia cepacia

<400> 81
gcccgtcaca ccatgggagt gggttttacc agaagtggct agtctaaccg caaggaggac 60
ggtcaccacg gtaggattca tgactggggg gaagtcgtaa caaggtagcc gtatcggaag 120
gtgcggctgg atcacctcct ttccagagct tctcgacaaa gttgagcgt cacgcttatc 180
ggctgtaaat taaagacaga ctcaaggggtc tgtagctcag tcgggttagag caccgtcttg 240
ataaggcggg ggtcgttggt tcgaatccaa ccagaccac cattgtctgg cggtaacaca 300
cctgaggcaa atctgtacat gggggcatag ctcaagctggg agagcacctg ctttgcaagc 360
aggggtcgtc ggttcgatcc cgtctgcctc caccaatcac caacgctaag ggcttgggtc 420
agacactgaa ccgagaattt tgcattggcg attgagccag tcagaggata tcaacagata 480

10074446-021402

<210> 84
<211> 23
<212> DNA
<213> Burkholderia cepacia

<400> 84
ccctgagtct gtctttaatt tac 23

<210> 85
<211> 20
<212> DNA
<213> Pseudomonas aeruginosa

<400> 85
ctttcgacga ttgttttagt 20

<210> 86
<211> 21
<212> DNA
<213> Stenotrophomonas maltophilia

<400> 86
tcaataaaag agacttgcgt c 21

<210> 87
<211> 18
<212> DNA
<213> Pseudomonas sp.

<400> 87
gattgccaaag gcatccac 18

<210> 88
<211> 18
<212> DNA
<213> Pseudomonas sp.

<400> 88
gaggaaggtg gggatgac 18

<210> 89
<211> 18
<212> DNA
<213> Pseudomonas sp.

<400> 89
tggaacgta ttcaccgt 18

10074246-021402